EXTRACT FROM THE FILES OF THE "REICHSFORSCHUNGSRAT".

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Probably some of you may have heard of the O.S.R.D. But no doubt most of you are still in the dark as to the significance of this more or less mysterious tetragram and as to the functions of the organization to which it refers. I shall therefore proceed to enlighten you. The letters O.S.R.D. stand for the Office of Scientific Research and Development, a civilian government agency, the members of which were drawn largely, though not entirely, from the scientific departments of the American universities. Nominally, the functions of the O.S.R.D. were to receive from the Army and Navy scientific problems, the solutions of which were of interest to the armed forces; to distribute these problems (along with appropriate financial grants) among American civilian scientists; and to report back to the military and naval authorities the scientific results obtained by the various investigators. What the O.S.R.D. actually did was to conduct scientific investigations largely on its own initiative and to ram down the unwilling throats of the brass hats the information which these worthies would have demanded if they had had sufficient cerebral development and scientific training to know what it was all about.

I have given you this explanation because, for about ten weeks last summer, I was engaged in work which required me to pay minute attention to the records of a German institution which may best be described as the opposite number to our O.S.R.D.

This organization was called the "Reichsforschungsrat", the Imperial Research Council; I shall refer to it hereafter as the R.F.R.

The R.F.R. came into being rather later than our O.S.R.D., which began to function in 1940. In fact, only early in 1942, by which time even Hitler had given up all hope of winning the war by Blitzkrieg methods, did the Nazis reluctantly turn to the non-party scientists of Germany for advice and assistance. The R.F.R. during most of its life-time was headed by one Professor Dr. Mentzel, a man of scientific training, but of no outstanding qualifications either scientific or personal, who held the title of Ministerialdirektor in the Reichserziehungsministerium; a phrase which may be translated as "Assistant Secretary in the Imperial Department of Education".

Some time during the early part of 1945, the headquarters of the R.F.R. were moved from Berlin to a place of refuge (what the Germans called an Ausweichstelle) where it might reasonably be expected to be secure from destruction by the bombs of the Allied air forces. The place of refuge chosen for it was a very small town, named Lindau, near Marburg in central Germany. Here the files of the organization were captured by the advancing American army. These files were transported to Paris, and there they came to my attention.

I shall not this evening give you any detailed description of the R.F.R. files or express any judgment as to the general value of their contents. They consisted for the most part (as anyone associated with the O.S.R.D. would have expected) of a dense mass of purely administrative papers--letters such as "Progress report forwarded to you on October 10th. Kindly acknowledge receipt of same". But scattered here and there through this dreary stratum of official correspondence, were occasional nuggets. These were of extraordinary interest, curiously enough not so much from the scientific as from the cultural historical point of view. One of these nuggets consisted of three documents, the translations of which I shall read this evening.

The first of these documents is a short covering letter dated at Berlin March 13, 1942, and addressed by General-admiral Witzell to Ministerialdirektor Professor Dr. Mentzel. In it, the admiral draws Mentzel's attention to an enclosed memorandum written by a German physicist whom we shall call Dr. Meyer. The second document dated Berlin, December 31, 1941, is Dr. Meyer's memorandum referred to in the above-mentioned covering letter. The third document dated Berlin, March 31, 1942, is Mentzel's comments on Dr. Meyer's memorandum. I have had some difficulty in translating these papers. At first I tried to preserve their peculiar linguistic flavor, but I had to give up that attempt. Nazi official correspondence is something which must be experienced to be appreciated.

Document No. 1

My dear Assistant Secretary:

In accordance with our conversation at the time of the meeting of the Imperial Research Council on February 26, I am sending you two copies of a memorandum by Professor Dr. Meyer. This paper deals with Russian scientists and technicians, and with the question of using them on German research problems.

Heil Hitler!
Yours very truly,
Witzell

Document No. 2

A report on the quality, political attitude and present condition of the physicists, engineers, and technicians in Soviet Russia.

by Professor Dr. Meyer

For a number of years I have been a professor and the head of a scientific department in one of the largest physical institutes of the Soviet Union; the Ukranian Physico-technical Institute in Kharkhov. I have also passed some years in the political prisons of the G.P.U., from which I was freed only during the war by the intervention of the German Imperial government. [This refers, of course, to the period of the Russo-German alliance. tr.] These experiences have enabled me to form an opinion about the position of Russian physicists and engineers in the Soviet Union, their usual attitutde toward the Soviet Government, and their general qualifications. In October and November of 1941, I made two trips to Kiev and Kharkhov for the purpose of taking over physical institutes for the Imperial [German] Air Ministry. These journeys have permitted me to judge of the attitude of Russian scientists, insofar as these persons have remained in the territories occupied by our forces.

(1) Qualifications

Despite the general very low level of education in Russia, that country still has, in the fields of mathematics and the exact sciences, an old tradition left over from Czarist times. A number of older professional men have succeeded by their own initiative, in rescuing something of this tradition and in bringing up a numerically small but highly skilled generation of successors. Besides these professional men who are already very old (like Lusin, Roshdestwensky, Joffé, etc.), there exists today in Russia a generation of physicists who were students in the years (1917-1922) of the civil war. Later, up to 1927, in the short period of industrial improvement associated with the New Economic Policy, these men received travelling grants and had an opportunity to become acquainted with German and other foreign institutions. Thus they acquired very high qualifications. This generation, which springs for the most part from the old intelligentsia and petit-bourgeoisie is today the leading force in scientific and technical matters in Russia. Particularly in mathematics and theoretical physics, which need but little help from experiment, the Russian physicists can show accomplishments which have obtained international recognition, as is proved by the names of Gamow, Fock, Tamm, Iwanenko, Landau, and others. In the experimental sciences such as experimental physics and technical physics, a professionally competent generation has grown out of the St. Petersburg school of Joffé and Roshdestwensky. These scientists, because they were permitted between 1925 and 1930 to study in foreign institutions, and because of the large sums invested by the government in scientific institutes, have had the opportunity to do scientific work and to train a generation of scientific successors. Russian physics can point to particular accomplishments in the fields of crystal-physics, physical optics, low-temperature and sub-atomic phycics, as well as in physical chemistry. Here too the number of highly trained physicists is not large, but their quality is internationally recognized.

(2) Influence of politics. Political attitude of the scientists and their technical assistants.

The greatest barriers to scientific development in Russia have been the political measures systematically directed by the Soviet government towards the destruction of the former bourgeoisie. Until 1935, restrictions were placed on the education of the children of the intelligentsia. In order to be admitted as a student, it was necessary to present proof of "proletarian origin". The children of the old intelligentsia were thus forced to lose years in factory work before they were allowed to enter a university. Moreover, the quality of the teaching was very bad, and the students were overburdened with duties of a social and political nature, such as "polit-courses", etc. In addition, there came the ~~separate~~ various waves of ever-increasing terrorism carried out by the political authorities (Tscheka, G.P.U., N.K.W.D.). Interspersed between these were occasional periods of relative liberalism. Each of the terroristic waves was introduced by a series of ostensible trials of so-called politically dangerous persons, among whom were a number of scientists and technicians. The principle waves were that of 1928-29 (associated with the Schachty prosecution), that of 1930-31 (associated with the Rasmin prosecution), that of 1935 (associated with the famine and with the dispossession of the Kulaks), and finally the greatest one of all, that of 1936-39 (associated with the prosecution of Pjatakow, Bucharin, and others). In each one of these terroristic raids, many hundred thousand intellectuals and members of the former bourgeois classes were arrested. In every instance, a large number of important scientists and engineers were victims of imprisonment. It may, therefore, be said without exaggeration, that, leaving aside a small number of young people, there is hardly a scientist or an engineer in Russia today who has not either himself been arrested for political reasons, or who does not at least possess near dependents or friends who have been struck by the waves of imprisonment. After each individual terroristic wave, a large number of scientists and technicians were released. These men will nevertheless carry with them throughout their lives the stigma of political unreliability. At every exacerbation of the political situation and at every one of the frequent changes in the political course, they stand in fear of rearrest. Among most of the scientists and technicians, as well as among their highly trained helpers, this situation has produced such a state of political apathy that, surfeited as they are with enforced political meetings and political influences in the institutes, a spirit of complete uninterest in political matters has developed among them. The one wish of these people is to be left alone to live in peace with their families and to carry on their work. Whenever they are allowed to do this, they are ready for any sort of loyal cooperation. It would be erroneous, although it might seem self-evident, to suppose that there is, in these circles, any intensive hate for the Soviet system. On the contrary, a large portion of the intellectuals, particularly those who are young and professionally competent, are somehow, despite all, convinced in principle of the correctness of the Soviet system. The terroristic activities and the material sufferings are not laid at the door of the system as such but are charged against Stalin and his personal coworkers, against the injustice of certain people's commissars, such as Jeshow and Jagoda, or even against persons in merely local authority. The spirit here described is characteristic not only of the former intelligentsia, but also of a large part of the so-called "Soviet-intelligentsia" which really springs in part from the former proletariat. The reason for this is that the Soviet terror has to a large extent been directed against classes and persons who were themselves supporters of the Soviet system. Evidence of this fact is the arrest of practically the entire corps of high Red Army officers in the years 1937-39. So far as I know, the political spirit just described has never led to active opposition to or sabotage of the Soviet system; it has merely produced political apathy.

(3) The remaining scientists (physicists) and technicians and their attitude toward us.

According to my experiences during two journeys to the Ukraine in the fall of 1941, it must be reckoned that most of the Soviet scientific workers in the physical institutions, acting under the sharp pressure exerted by the Soviet authorities, have moved into the interior of Russia. I know of cases where scientists who refused to leave were shot. Most of them departed much against their will, as I learned by messages from personal friends which were delivered to me by their colleagues left behind.

According to experiences to day, we can count on finding not over 10% of the scientific workers in the physical institutions and about 80 to 90% of their technical assistants, who are in part very highly trained. These remaining scientists may be divided essentially into two categories: first, older professors from unimportant institutions who were mostly occupied with pedagogic activities; second, young workers in more important institutions who managed somehow, by hiding in the cellars or by flight to the villages, to escape the mobilization and evacuation. Of these two categories, undoubtedly the second, together with its higher technical assistants, is scientifically the more valuable. The commando to which I was attached noticed everywhere among the Russian scientists and technicians who had remained behind, a tendency to loyal cooperation with our occupation authorities. Sometimes, these people have even shown a self-sacrificing interest in the preservation of their institutions. In some places, important technical projects have been undertaken on the basis of this cooperation and have already led to tangible results. For example, the Volhynian supplies of piezo-quartz were secured by the aid of the members of the Geological Institute of the Academy of Sciences of Kiev, for the benefit of an ultra-short-wave-magnetron project in a laboratory at Kharkhov. Naturally, in order to secure such aid, it was necessary for us first to create in the Russian and Ukrainian scientists involved, a feeling of readiness for loyal cooperation, to win their confidence, and to show some understanding for their very difficult and even catastrophic material condition. For example, almost the entire remaining working staff of the Geological Institute just mentioned came day after day for almost two months to the Institute and busied itself, without any remuneration, in collecting and arranging the records, before we managed to assure them of a certain amount of material security. In Kharkhov, where the few scientists and many technicians who had remained behind were well-known to me because of my earlier activity in the Institute, I found, for example, that a van de Graaf high tension apparatus had been completely preserved by the initiative of a former laboratory assistant. This woman, by various tricks, had managed to rescue the valuable apparatus (which she had for the most part built herself) from the clutches of the demolition force, and was able to turn it over to us unharmed. The same is true of the workshops of the Physical Institute of the University of Kharkhov which were saved by the personal initiative of an old master-mechanic (himself an outstanding specialist in the construction of apparatus for the liquification of hydrogen and helium) although otherwise every lathe had been made useless by the demolition squad. With regard to some of the scientific and technical help in the Kharkhov Physico-technical Institute, I can draw trustworthy conclusions as to their loyalty from their more than decent and helpful attitude towards me in 1937 when my position as a German was already endangered by the unrestricted hue and cry after Germans, and by the wave of imprisonments of scientists. At that time, most of my scientific colleagues had completely discontinued all association with German specialists.

(4) The class of physicists

It is impossible to determine the number of persons who, if their personal safety and maintenance were secured under proper material conditions and in suitable places, might be considered with the object of employing their scientific and technical training in the service of the German army, and later in the reconstruction of the occupied territory. Certainly this number is not very large. I can only estimate it roughly by extrapolating, on the basis of my experiences in the few institutions where conditions are well-known to me, to the whole number of institutions. Accordingly, I should judge that, in the Ukraine, the whole class of real physicists with university training who may be considered for the purposes mentioned does not exceed 100-200 persons. In addition, there is a group of 1000-2000 persons who are in part very good technical workers (mechanics, glassblowers, laboratory helpers, electricians). Related sciences and bordering fields (physical chemistry, mathematics, astronomy, metallography) which are not included in the above estimates should also be considered. Experience has shown that conditions in the other natural sciences are approximately the same as those in physics.

Berlin, December 31, 1941
(signed) Meyer

Document No. 3

My dear General Admiral:

Thank you for the suggestions sent with your note of March 13 that Russian scientists and technicians be inducted into the forces now engaged in the solution of German scientific problems. I have given this matter careful consideration. At the moment, the position in the scientific sector in Germany is such that all the current investigations deal almost exclusively with matters of political and military importance which must be kept secret. Hence, the induction of Russian personnel would raise strong misgivings. Moreover, the German defense organizations [redacted] cannot be relied upon to furnish trustworthy opinions about the individuals in question. Add to these considerations the difficulty in getting hold of the workers themselves, who are only rarely to be found at the places of their former activity. It is important also to point out that scientific and technical forces of all kinds, in the occupied regions of the East, are now being extensively used on the spot to obtain a new generation of trained professional personnel. For example, in Riga and Dorpat, the universities have been reopened so that suitable inhibitants of the Baltic districts may be given the opportunity to become professionally trained and later to be drawn on in support of the German civil authorities. In Tschernowitz, too, educational institutions have been set up; others will follow. These measures have led to the seizure of nearly all the available professional forces. They would be most unwillingly surrendered for use in Germany. So here too the acquisition of the scientists in question would meet with great difficulties. I am, therefore, forced to postpone the project, insofar as it falls within the scope of the activities of the Imperial Research Council. I shall however, return to the subject later on.

Heil Hitler!
Yours very truly,
(signed) Mentzel

And there the file ends. It is, of course, very fragmentary and leaves open a number of puzzling questions. For instance, how did a memorandum on the conditions in the interior of Russia find its way into the hands of the German Navy? That seems a curious place in which to run across such a document. I don't know the answer, but my guess is that Meyer was personally acquainted with some official in the Navy Department. Probably he asked this friend to see that his memorandum was transmitted to the higher authorities and received from them the attention which he felt it deserved. At any rate, if that is what he wanted, his wishes were certainly fulfilled. Then again, what was the [redacted] upshot of the whole story? Was the admiral so convinced by the assistant-secretary's arguments that he followed the latter's suggestion and allowed the matter to rest; or did he go over Mentzel's head and bring up the question in higher quarters? That too is a question which I cannot answer, but here also I may hazard a guess. My opinion is that, in view of Mentzel's standing in the official hierarchy, and in view of the hard-headed good sense displayed in his response, Meyer's memorandum never led to the importation of Russian scientists into Germany with the object of carrying out the purposes mentioned in that memorandum.

And lastly, what sort of a person is Meyer? How good is his judgment, and how much weight is to be attached to his views? I have talked with a number of persons who are personally acquainted with him. They all agree that he is a competent physicist of good standing and reputation in his profession. As to his personality, opinions diffe One American scientist went so far as to describe him to me as a maladjusted neurotic whose opinions on any social question had better be disregarded. [redacted] Another American scientist, who impresses me as being himself a sane and well-adjusted person and who this summer spent some time with Meyer in Germany, writes about him as follows:

> "Dr. Meyer is not typically German. He has been around quite a bit during his work as a physicist, and in his approach to problems and people he is less formal than German scientists in general. As a result it is easy for an American to deal with him. He speaks more or less the same language, in the spiritual sense."

"His life has been a bit 'bohemian' and certain of his personal acts one might criticize a bit. This does not affect his scientific honesty as an observer of people and institutions, however. I should judge him to be quite keen as such an observer, though any views he might have expressed in writing may of course be expected to be written with his specific audience in mind. With allowance for this, his writings should contain useful and essentially correct information."

Luckily we have with us this evening Professor Dr. Meyer's old teacher, the man under whose direction he did his work for his Ph.D. degree. Before throwing my paper open for discussion, I will, therefore, ask Dr. James Franck, formerly of the University of Göttingen and now of the University of Chicago, to say a few words about Meyer's career and personality. After that, ladies and gentlemen, the floor is yours.